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| 10/023,962 | 12/18/2001 | Jorge Mazza | 3162/OK107 | 6593 |
| 7590 12/31/2003 | | | EXAMINER | |
| DARBY & DARBY P.C. 805 Third Avenue New York, NY 10022 | | | EINSMANN, MARGARET V | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1751 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant No.

10/023,962

Applicant(s)

MAZZA, JORGE

Examiner

Margaret Einsmann

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the amendment of 10/7/03. Applicant's amendments have been entered and applicant's remarks carefully considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "spacer arm" in claim 1 is vague and indefinite. It is necessary that the product be described with sufficient particularity that it can be identified so that one can determine what will and will not infringe. *Benger labs. ltd. v. R.K. Laros Co*; 135 USPQ 11; *In re Bridgeford* (CCPA 1966) 149 USPQ 55; *Locklin et al. v. Switzer Bros., Inc.* 131 USPQ 294.

The term "spacer arm" appears to refer to a linking substituent. Yet, in claim 2 the spacer arm is appended to the end of the colorant. Since claim 1 and its dependent claims are ambiguous, the examiner has rejected said claims over art having either a linking moiety or a dangling substituent. Applicant argues that the spacer arm is defined in the specification. However, limitations in the specification cannot be read into the claims. If applicant wishes to limit the spacer arm as described in the specification, the limitation needs to be in the claims. In the response of 10/7/03 applicant states that the

Art Unit: 1751

claimed spacer arm is non-reactive (page 15) while the arms in the dyes used in the rejections are reactive. If the arms on the dyes in the references used in the rejection are different from the claimed arms, the claimed spacer arms must be further defined so that the differences are clear.

Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3 the term ftalocianine is not understood. Is it another term for phthalocyanine?

Claim 6 is not properly dependent on claim 5 for two reasons.

- There is no basis in claim 5 for W to be equal to NR_1R_2
- In claim 6, Y equal to hydroxyalkyl is broader than Y equal to C_{1-10} hydroxyalkyl in claim 5.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2 ,3,4,6,12 16, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamanaka et al., US 4,725,285.

The dye of example 7 In column 6 is an anionic reactive azo dye used to dye cotton having a linking arm $NH(CH_2)_2SO_3Na$ wherein $X = NR_1$, $R_1 = H$, R is a C_2

straight chain alkylene group and $Z = \text{SO}_3\text{Na}$. If the spacer arm is considered $\text{CH}_2\text{CH}_2\text{SO}_3\text{Na}$, then the dye reads on claim 4. The dye at the top of column 5 has a spacer arm $\text{NHCH}_2\text{CH}_2\text{NH}$ which meets the limitation of claim 6.

Response to Arguments and Amendments

Applicant's arguments filed 10/7/2003 have been fully considered but they are not persuasive. Applicant argues that the reference does not show the newly added claim limitation where the spacer arm modifies at least the affinity of the coloring agent for the substrate. Applicant agrees that Yamanaka discloses an anionic dye with the claimed spacer arm. Applicant must be aware that a chemical compound cannot be separated from its properties. Since the coloring agents are identical, their properties must be identical. The reference does not have to explicitly state that the spacer arm modifies at least the affinity of said anionic coloring agent for said substrate. Applicant further argues that the example does not show how the coloring agent may be used, nor does it disclose the coloring properties of the coloring agent. Applicant is certainly aware that reactive dyes are conventionally known to dye textile substrates. IF not, applicant is directed to column 1 of Yamanaka et al. for a discussion of the dyeing properties of said reactive dyes.

Claims 1,2, 9,10,12,14,16 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Chambers et al. The reactive group beta-sulfatoethyl sulfonyl reads on applicant's claimed spacer arm as defined in claim 1. Note the dyes in column 25

and 26. The first three all have two of said groups. Said dyes are used to dye polyester-cotton blend materials. See abstract.

Response to Arguments and Amendments

Applicant's arguments filed 10/7/2003 have been fully considered but they are not persuasive. Applicant argues that the reference does not show the newly added claim limitation where the spacer arm modifies at least the affinity of the coloring agent for the substrate. Applicant must be aware that a chemical compound cannot be separated from its properties. Since the coloring agents are identical, their properties must be identical. The reference does not have to explicitly state that the spacer arm modifies at least the affinity of said anionic coloring agent for said substrate. Additionally, applicant states that Van chambers' dyes are not anionic. Note the dyes in columns 25 and 26 which indeed are anionic.

Claims 1-6, 9,10,16,17,20 are rejected under 35 U.S.C. 102(b) as being anticipated by Mazza et al., US 5,597,485 and/or its continuation US 5,876,597. The citations below are from '485. Int(V) at the bottom of columns 13 and 14 is an anionic colorant having the spacer arm $\text{NH}(\text{CH}_2)_6\text{NH}_2$. Applicant may argue that said dye is an intermediate. Note column 15 lines 53 to col 16 line 18 where said dye is isolated and dried. Accordingly applicant teaches how to make and collect said dye. Regarding the process claims, the composition comprising the dye is used to form a colored monomer, said monomer being the dyed substrate. See F in column 16. Example 6 in column 19 describes the formation of a colored polymer, said polymer being the colored substrate.

Response to Arguments and Amendments

Applicant's arguments filed 10/7/2003 have been fully considered but they are not persuasive. Applicant argues that the reference does not show the newly added claim limitation where the spacer arm modifies at least the affinity of the coloring agent for the substrate. Applicant must be aware that a chemical compound cannot be separated from its properties. Since the coloring agents are identical, their properties must be identical. The reference does not have to explicitly state that the spacer arm modifies at least the affinity of said anionic coloring agent for said substrate.

Claims 1-4, 6 rejected under 35 U.S.C. 102(b) as being anticipated by Atkinson et al, US 4,431,544. Column 14 describes the addition of 1,6 diaminohexane to Procion green H4G an anionic reactive dye forming an anionic colorant with a spacer arm. Noting the description of the linking group from col 3 lines 50 to col 4 line 41, the spacer arm is attached to the triazinyl group of the reactive dye; said spacer including Y which is a nucleophilic group -NH-, -O- or -S- as claimed., R which may be $-(CH_2)_n$ as claimed and X which may be amino, carboxyl or other polar groups as claimed.

Response to Arguments and Amendments

Applicant's arguments filed 10/7/2003 have been fully considered but they are not persuasive. Applicant argues that the Mazza references do not show the newly added claim limitation where the spacer arm modifies at least the affinity of the coloring agent for the substrate. Applicant must be aware that a chemical compound cannot be separated from its properties. Since the coloring agents are identical, their properties must be identical. The reference does not have to explicitly state that the spacer arm modifies at least the affinity of said anionic coloring agent for said substrate.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazza or Atkinson in view of Cockett et al., US 5,846,430 and Akahori et al., US 5,463,032. Mazza and Atkinson are applied as in the above rejections as disclosing fiber reactive dyes which have been modified by the addition of a spacer arm. Cockett discloses that fiber reactive dyes are used in the textile, paper and leather industries. See col 1 lines 14-16. Example 1 is a composition comprising several fiber reactive and other anionic dyes. Akahori et al disclose the variety of substrates which are conventionally dyed with reactive dyes as well as conventional reactive dyes which may be mixed with the dyes of their invention see col 11 lines 10-30 for the list of reactive

dyes including the dye Procion dye used by Atkinson and column for the list of substrates dyeable with reactive dyes. It would have been obvious to the skilled artisan to dye the substrates claimed with the dyes disclosed by Mazza or Atkinson with the expectation of successful dyeing because the addition of the spacer arm did not interfere with the chromophoric portion of said dyes, and said reactive dyes have known utility in the dyeing of the claimed substrates as disclosed by the two secondary references.

Response to Arguments and Amendments

Applicant's arguments filed 10/7/2003 have been fully considered but they are not persuasive. Applicant argues that the Cockett references does not teach the subject matter of the claims. It need not teach the specific dyes as claimed, but it need not as both Mazza and Atkinson teach the specific dyes claimed. Cockett was applied for his teaching that fiber reactive dyes are used in textile, paper and leather industries for their dyeing properties. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Cockett teaches the well known utility of reactive dyes as textile, leather and paper

coloring agents. Applicant argues that Cockett is non-analogous art. However, as shown above, this is not so. In response to applicant's argument that Cockett is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, that is forming dyes with improved affinity for their substrates. Applicant next argues that Akahori teach reactive dyes while the spacer arm claimed is non-reactive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., non-reactive spacer arms) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

New grounds of rejection:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

Art Unit: 1751

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no basis in the specification for the insertion of "n" into the formula on line 7 of claim 2.

Double Patenting

Applicant is advised that should claims 7 and 8 be found allowable, claims 21 and 22 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1751

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-Th and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.

Margaret Einsmann
Primary Examiner
Art Unit 1751

December 23, 2003